1

Lesson Preparation book

ICT

Prep 1

First Term

2025-2026

Teacher' s Biography

Name: .....

School: .....

The educational administration: .....

Qualification: .....

Teaching Subject: .....

Comprehensive School: .....

The school to which he is delegated: .....

Date of appointment: .....

The job is on the staff: .....

Teacher Code: .....

Mobile Number: .....

Teacher	Supervisor	School Principal
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Daily class schedule

Session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

session Day	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eightieth	Ninth
Saturday									
Sunday									
Monday									
Tuesday									
Wednesday									
Thursday									

Teacher Supervisor School Principal

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The Lesson Objectives of Computer

At the end of the first term the student will be able to:

- ✍✍Understanding the concept of green technology and its impact on the environment.
- ✍✍Understand the uses of green technology in our lives.
- ✍✍Explore theconcept of digital transformation .
- ✍✍Realizing the importance of digital transformation in improving work flow efficiency.
- ✍✍Explain the types of operating systems, their functions and roles.
- ✍✍Learn how to install and remove software and peripherals.
- ✍✍Use email correctly.
- ✍✍Explain the concept of cloud computing and learn how to store data and share files.
- ✍✍ UseGoogle Meet proficiently.
- ✍✍Learn the basics of dealing with databases.
- ✍✍Working application for one of the digital project .

Teacher	Supervisor	School Principal
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Specific objectives of the subject of Computer Science and Information and Communication Technology

At the end of the first term the student will be able to:

- **Explain** the concept of green technology
- **Explain** Digital transformation tools.
- **Used** One of the digital services
- **Count** Types of operating systems
- **Make** a difference Between operating system interfaces.
- **Practice** Steps to install and remove a program on the device
- **Deliver** Attached devices such as a printer to the computer.
- **Explain** Steps to download files to the device
- **Explain** Email elements
- **Practice** Steps to create an email.
- **Discusse** Services provided by email
- **Explain** The importance of cloud computing
- **It is concluded** Areas of use of cloud computing.
- **Practice** Upload and share files to the cloud
- **Explain** Big data concept
- **specifie** The difference between creating a table via Word – Excel – Access .
- **Create** Simple spreadsheet on Access
- **Explain** Steps to implement a model in databases
- Perform a query in the database that he has implemented.
- **Explain** Stages of designing his research project
- **Designs** one of the projects he is looking forward to.
- **Expresse** About his research ideas

Teacher	Supervisor	School Principal
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Distribution of computer and information technology content

For 1st.Prep 2025 / 2026 - First Term

MONTH	week	DATE	TOPIC	Assessments and tests
September 2025	1	20 / 9/ 2025	Lesson ١ : Green Technology	بداية الفصل الدراسي الأول
	2	27 / 9/ 2025	Lesson ٢ : Digital Transformation and Its Importance in Our Daily Lives	
October 2025	3	4 / 10/ 2025	Lesson ٣ : Operating Systems	
	4	11 / 10/ 2025	Lesson ٤ : Installing and removing software and digital accessories	
	5	18 / 10/ 2025		
	6	25 / 10/ 2025	Lesson ٥ : Email	فقاً لقرار ١٣٧ يتم عمل: اختبار أسبوعي واختبار شهري ١
November 2025	7	4 / 10/ 2025		
	8	8 / 11/ 2025	Lesson ٦ : Cloud computing	
	9	15 / 11/ 2025	Lesson ٧ : Google Meet and Managing Your Project	
	10	22 / 11/ 2025	Lesson ٨ : Database Design	فقاً لقرار ١٣٧ يتم عمل: اختبار أسبوعي واختبار شهري ٢
	11	29 / 11/ 2025		
December 2025	12	6 / 12/ 2025	Lesson ٩ : Forms and Inquiries	
	13	13 / 12/ 2025		
	14	20 / 12/ 2025	Project + curriculum review	
	15	27 / 12/ 2025		
January 2026	16	3/1/2026	The beginning of the first semester exams	
	17	10 / 1/ 2026		

Teacher ----------

Supervisor ----------

School Principal ----------

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	One	Green Technology

Introduction / What is the concept of greentechnologyAnd how does it contribute to maintaining a clean environment?

Lesson objectives/

1- **Identify** what thegreen technology is. 2- **Conclude** that the concept of sensor functionality and its importance in our lives

3- **Propose** that the concept of sensor functionality and its importance in our lives

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to be: Environmental Awareness Work values: perseverance Globalization Issues : Entrepreneurship in Clean Energy Projects	Electronic board - textbook Educational video		☐Dialogue and discussion ☐ Problem solving	✍ The concept of green technology: It is called sustainable technology or clean technology . Its idea is based on technological tools that contribute to preserving the environment, not harming it, and rationalizing the consumption of its resources ✍Egypt's role in using green technology: Using electric cars as an alternative to fuel-powered cars to reduce harmful emissions from car exhaust on the one hand, and reduce fuel consumption on the other hand. They run on batteries and are equipped with a charging station that allows the car to be connected to an external electricity source for charging. ✍ Areas of use of green technology: Green technology is used in many areas of life, including: Renewable energy Rationalization of energy consumption Waste Management - Water Treatment ✍Benefits of green technology: ▪ Preserving the environment from climate change ▪ Conserving resources)water – electricity(through: 1- Sensors 2- Solar energy technology	In collaboration with your classmates and with the help of your teacher, search the Internet for tools. Technology that contributes to the conservation or rationalization of consumption water - electricity	Searching the Internet for a picture of the different types of sensors	Sensors are used in many tasks, including.....
Weekly Assessment				Put a(√) Or (×):- Electric cars are a form of green technology			

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Two	Digital Transformation and its importance in our daily lives

Introduction / What does digital transformation mean?

Lesson objectives/

1- Discusses many digital services provided by the Egyptian state

2- Explain digital transformation tools

3- Use an online platform" Digital Egypt Platform

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Cooperation Globalization Issues : Addressing Global Challenges Through Digital Transformation	Electronic board – textbook Educational video		☐Dialogue and discussion ☐brainstorming	✍ Digital transformation: It is the integration of digital technology into all aspects of business to improve workflow efficiency, reduce costs, and develop Products and services offered in new and innovative ways ✍ The importance of digital transformation: Digital transformation is essential for institutions and companies for several reasons , including: ▪ Increase efficiency and production ▪ Raising the level of services and products provided to customers. ▪ Maintaining competitiveness ▪ Improve decision making ▪ Reducing energy and resource use Digital transformation is a national project that moves Egypt to operate through an information environment that connects all government agencies to each other ✍: Digital transformation tools Collaboration and – Workflow Management Tools – Electronic Payment Tools Communication Tools – E-Learning Tools – Artificial Intelligence Tools – Cloud Computing Tools – Cybersecurity tools The relationship between green technology and digital transformation: Green technology is closely linked to digital transformation. Examples of green technology applications and digital transformation together: • Smart power grids. • Precision agriculture. • Smart buildings. • Smart transportation.	Search for the Digital Egypt website	Search the internet for one of the most important electronic payment applications in Egypt	Green technology and digital transformation tools work on .....

Weekly Assessment	Complete: You can use electronic payment applications through the application .....

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Three	Operating System

Introduction / How digital devices such as computers or cellphones operate?

Lesson objectives/

1- Categorize the operating systems (computer - cellphones)

2- Distinguish among operating system interfaces

3- Use an operating system on a device (school - home)

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Globalization Issues : Monitoring the Development of Operating Systems Worldwide	Electronic board - textbook Practical application		☐ Dialogue and discussion ☐ cooperative learning	✍ Operating system: It is the interface between the user, hardware, and software. It is responsible for: managing the hardware components, running all software, and helping the user accomplish his various tasks on the computer easily and smoothly Operating systems are essential for the operation and management of various modern electronic and smart devices. ✍: Some examples of modern electronic and smart devices, and the operating systems used PCs MacOS and Microsoft Windows And different distributions of Linux Mobile devices ← Android Google and from operating system iOS operating system From Apple their own operating systems optimized for applications Games and Multimedia : Game consoles Wearable devices : such as watches Smart and fitness trackers that use operating systems Designed for her Network Devices - Automotive Systems - Embedded Systems - Industrial Control Systems Operating system startup screen : The operating system startup screen "desktop" includes the following screen: varies depending on the operating system version. 	Find the most important functions of the operating system through the Internet	Prepare a one-slide presentation with a written sentence about the importance of operating systems	Most modern cars have operating systems to control various functions such as.....
Weekly Assessment				Complete Servers use operating systems such as			

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Four	Installation and removal software

Introduction / How can you add, install, or remove software on your computer or cellphone?

Lesson objectives/

1- Practice Steps to install and remove a program on the device

2- Connect peripheral devices suchas printers to my personal computer

3- Connect peripheral devices such as printers to my personal computer

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Cooperation Globalization Issues : Keeping Up with Hardware and Software Development	Electronic board - textbook Practical application		☐Dialogue and discussio ☐brainstorming ☐active learning	As you prepare and get ready to implement your project on your computer or mobile, you will need to use many From the program ✍:First: - Install the program The installation process depends on the form in which the program comes. It may be in the form of: CD orDVD File downloaded from the Internet - Compressed file - ✍: Second: - Remove or uninstall the program There are two ways to remove or uninstall the program to do this: - The program does it itself- or through the ControlPanel Note: Removing unused programs saves disk storage space and makes the device faster and . easier to use ✍- : Third: - Preparing and installing the devices ←In many cases, new devices include a CD, DVD . ← may include a matching driver for the new peripheral ←may not include a matching driver for your new peripheral ✍✍(practical part of the lesson) : Installing the printer Firstly: Installing a local printer Second: Installing a printer that does not support plug and play 	Install the software you may need for your .project	Write the steps to install a program from a .CD	When you download the program from the Internet, it is in the form of.....

Weekly Assessment	Complete Removing a program means that you are doing ....

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Five	E – Mail

Introduction / How can you create your personal email account?

Lesson objectives/

1- **Explain** the components of an email

2- **Practice** the steps for composing an email

3- **Discuss** the services provided by e-mail in dealing with websites

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Cooperation Globalization Issues: Participation in the Digital World	Electronic board – textbook Practical application		☐Dialogue and discussio ☐brainstorming ☐ Practical Training	✍ **Email:** A digital communication system used to send and receive messages between users over the Internet. It is a cloud computing tool used to share texts and files. It is one of the most popular means of communication in the world and one of the indirect communication tools. ✍ : **Components of an email address** An email address consists of three main components: user name -١ User name -٢ The @ "symbol at sign -٣ "Domain name ✍: **Advantages of using email** Speed.... Cost.... Ease.... Diversity.... Reliability.... Digital Services ✍ **Disadvantages of using email** Hacking....Spam....Scams....Viruses....Privacy ✍ : **Email Providers** : There are many free email providers available such as Gmail Yahoo Mail Hotmail Google Many electronic services. To create an email Electronically through Gmail brings you service and get other services for Google Account must be created Google Account ❑ Google account consists of UserName and Password	"Send an email to one of your friends."	The following email addressis: alaa٢٠٢٥@Gmail.com. Write what it consists of.	Email is considered.....
Weekly Assessment				Complete One of most important uses of email is the...			

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Six	Cloud Computing

Introduction / Which digital tools and applications are used for creating and sharing files with your teacher and classmates?

Lesson objectives/

1- **Explain** The importance of cloud computing in accomplishing tasks

2- **Practice** Upload and share files to the cloud

3- **Discuss** the areas of use of cloud computing in our lives

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	**Subject**	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness **Work values:** Cooperation **Globalization Issues :** Participation in the Digital World	Electronic board – textbook Practical application		☐Dialogue and discussio ☐brainstorming ☐ Practical Training	✍ **Cloud computing:** **It is a model for providing digital services over the Internet. Such as:** √Cloud storage service or computer storage √online software (application) service √Electronic Resource Sharing Service ✍ **Benefits of cloud computing :** Ease of access ..... Service availability ..... Reducing material costs Sharing digital resources with others ..... ✍ **Areas of use of cloud computing applications in daily life :** Communication – Computer Storage – Digital Project Production – Education – Entertainment ←**There are also other fields such as:** e-shopping – online banking services – healthcare services ✍ **Data processing and storage in cloud computing :** It depends on a huge infrastructure whose steps can be summarized as follows: 1. Data collection 3. Data processing 5. Data management 2. Data transfer 4. Data storage 6. Data Access ✍ **Requirements to obtain cloud computing services :** Account with a computing service – Internet connection – Internet browser – phone Computer or provider ✍ **Most popular computing service providers Cloud** Amazon Web Services ..... Microsoft Azure ..... Google Cloud Platform	Find areas of use of cloud computing	Using a word processing program, write one of the benefits of cloud computing	The computing storage service is.....

Weekly Assessment	**Complete** Requirements that must be met to obtain cloud computing services include .....

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Seven	Google Meet and Project Management

Introduction / Which What digital applications did you were study in previous classes for communication with colleagues and friends, and how did you use them?

Lesson objectives /

1- **Create** a meeting with my colleagues via Google meet 2- **Share** files with my colleagues via the Google meet application

3- **Follow** the correct procedures for digital communication with my colleagues

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Cooperation Globalization Issues : Participation in Conferences	Electronic board - textbook Google Meet app		☐Dialogue and discussio ☐brainstorming ☐Collaborative Learning	✍ **Google Meet : -** It is a service that allows users to make group video calls. Developed byGoogle , it i also used for screen sharing, chatting, real-time collaboration, and preparing and .producing collaborative projects between students ✍ ؟How can you get there Google Meet ؟ • From your PCvia the link https://meet.google.com •by downloading the app Google Meet for Android devices using theGoogle Play Store To create a meeting from" Google Meet has several options through which you can hold a meeting 1-Start an immediate meeting ؛- Create a meeting for a later time ✍ :Some options and features that can be used during the meeting • Raise your hand in session to ask to speak • Send messages in session to participants • Share the presentation with participants •Stop sharing the presentation	Write the steps to download the Google Meet application on the computer	Write one of the benefits of Google Meet	To create an instant meeting from Google Meet, we choose the command.....
Weekly Assessment			Complete: - Google meet is a				

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Eight	Database Design

Introduction / How can you establish a database for your class?

Lesson objectives /

1- Explains What Bigdata is

2- Identify The difference between creating a table via Word - Excel - Access

3- Creates Simple data table on Access

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Cooperation Globalization Issues: Participation in Conferences	Electronic board - textbook Access app		☐Dialogue and discussio ☐brainstorming ☐Collaborative Learning	✍ Databases : is a group of data and information that are organized and linked to It each other . The database is used to store Information and easy retrieval And efficiency . Where information is stored and managed digitally ✍ The importance of databases in our lives, such as: Saving student data at school Keeping medical records in hospitals - Track inventory in stores - ✍ Advantages of using databases : organization - efficiency accuracy - security - sharing - ✍ Databases can be used in : websites - data analysis - scientific research - commercial applications ✍ Big Data : Very large and diverse sets of structured and unstructured data. Organized and semi-organized systems continue to grow over time , and cannot Traditional data management and storage , the amount of data is increasing as a result of the rapid development of digital technology, such as artificial intelligence(AI) and the Internet of Things ✍ spreadsheet It is an essential element in building databases and is the only source of data within a database,consists of rows and columns . ✍ Programs used to create a spreadsheet:Word - Excel - Access ✍ Steps to create atable inAccess(practical application in class)	Mention some areas that require the use of databases	Write one of the features of databases	You should use the program ..... if you have a complex amount of data
Weekly Assessment				Put a(√) Or (×):- Databases are used to store student data in school ( ).			

Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Nine	Database Design

Introduction / How can you establish a database for your class?

Lesson objectives /

1- Explains the steps to implement a Form in databases

2- Perform a Query in the databases that I implemented

3- Use the operations (add field – hide field from the query result) for the database

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Accuracy Globalization Issues : Dealing with Digital Systems Professionally	Electronic board – textbook Access app		☐Dialogue and discussio ☐Collaborative Learning ☐Practical Training	**Form:** is a graphical interface specifically designed to interact with the data stored in a database. It is a screen that displays specific information from the database and allows the user to **enter, edit, or delete** this information in an organized and convenient way. **Creating a form:** *(Practical activity in class)* **Queries:** Queries are tools used to **retrieve data from a database according to specific criteria or conditions**. Through a query, you can get information from the database based on the stored data. **Examples of queries:** • Create a query to display the record of a specific student. **Creating a new query:** • Microsoft Access provides several ways to create a query (Practical activity in class). • **Criteria** in a query help you select specific items in an Access database. • If a record matches all the criteria entered in the query grid, it will appear in the query results. **To add criteria to a query:** (Practical activity in class)	Execute a query to show the record of students who scored less than ١٨ points	Create a database named "Student Results	In a database table, we must specify a data type for each .....
Weekly Assessment			**Complete: –** The form is a.....				

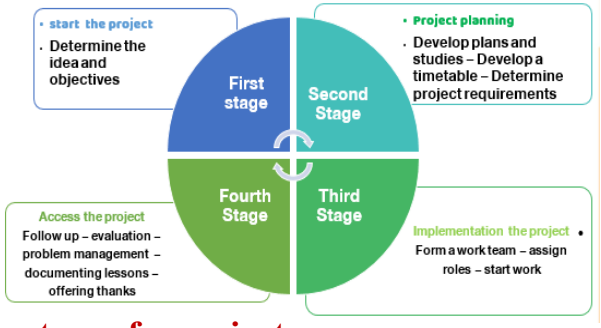
Teacher's Signature

Grade	Class	Date	Period	Term	Lesson	Lesson Title
PREP 1				First	Ten	Your Digital Project

Introduction / How can you design your digital project? Which digital applications are used to express your idea?

Lesson objectives/

1- Explain Stagesof designing his research project 2- Design one of the projects I am looking forward to 3- Discuss hisresearch ideas in various ways

Skills, values and issues covered in the lesson	Teaching Aids	Assistive technology for integration students if available	Teaching strategies	Subject	Educational activities	Formative assessment	Evaluation
Learn to Be: Technological Awareness Work values: Accuracy Globalization Issues : Handling digital systems professionally	Electronic board – textbook Access app		☐Dialogue and discussio ☐Collaborative Learning ☐Practical Training	**Project Implementation Stages:** The stages of any successful project are divided into **main interconnected stages**, each contributing to achieving the desired objectives. They can be summarized as:  **To implement the steps of a project:** • **Propose project ideas** … For example, objectives from the "Great Nile River and the World Rivers" project *(Practical activity in class)*. **Applications you need during the project implementation Applications from: Google App** • **Google Docs** Cloud application to create a text file. • **Google Sheets** Cloud application for creatingspreadsheets. • **Google Slides** Cloud application for creating presentations	Create a presentation on one method of conserving resources.	Write some benefits of Google Apps applications.	Planning and studying is considered part of the ..... stage.
Weekly Assessment			Complete: – The form is a.....				

Teacher's Signature